



DATE MAILED 11/21/90

1. Claims 1-4 and 37 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claims 1 and 37 contain much functional language not supported by recitation in the claim of sufficient structure to warrant the presence of the functional language in the claim. Part b) of both claims 1 and 37 seem to describe in functional terms the many functions of the "element selection logic means" without setting forth any structural limitations which could serve to distinguish in some patentable sense.
3. Claims 1-4, 11-12, 19-22, 37 and 38 are rejected under 35 U.S.C. § 103 as being unpatentable over Gordon.
4. Gordon teaches a control processor very similar to Applicant's claimed computer and method of operation. Gordon teaches the invention substantially as claimed including accessing instructions (microinstructions) from a sequence, determining a function for each instruction, determining a class of each function (type of microinstruction), and executing the instruction in an optimum manner. See abstract of Gordon. It is noted that Gordon does not disclose of the individual elements being on a common support substrate as is claimed. However, it is common knowledge in the prior art to form a given processing system on a common substrate in the same field of endeavor for

the purpose of integrating the system into a more simplified package. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the system of Gordon on a common substrate in order to integrate the system into a more simple package, and thus form a system and method on which the claims read.

5. Claims 39-41 are rejected under 35 U.S.C. § 103 as being unpatentable over Gordon in view of McAulay.

6. Gordon discloses the invention substantially as claimed, as above, but does not disclose transmitting and switching signals optically to various elements handling the routines. However, McAulay teaches the use of optical interconnections for processing communication transmissions and switching for the purpose of faster more efficient dynamic reconfigurability. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Gordon's signal interconnections with optical interconnections as taught by McAulay in order to provide Gordon with faster and more efficient signal routing and thus form a system and method on which the claims read.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin A. Kriess whose telephone number is (703) 308-3098.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0754.

KAK
KAK/jrm
November 14, 1990


KEVIN A. KRIESS
EXAMINER
ART UNIT 237